S/137/62/000/004/094/201
A052/A101

18.8200

AUTHORS: Starikova, G. V., Presnyakov, A. A.

TITLE: On the anomalous decrease of ductility of $\alpha + \beta$ brasses

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 4, 1962, 24, abstract 4I144 ("Tr. In-ta yadern. fiz. AN KazSSR", no. 4, 1961, 33-38)

TEXT: The part played by $\alpha \rightarrow \beta$ transformation in raising the plastic properties of Л 62 (L62), ЛС 59-1 (LS59-1) and Л 52 (L52) (β-brass) brasses was investigated. The value of δ at static tension in the temperature range of 600 - 900°C was taken as the measure of ductility. L62 and LS59-1 brasses have maximum δ values (~180%) at 870 and 740 - 770°C respectively. Pure β-brass (L52) has at the above temperatures a considerably lower value. Obviously the anomalous high δ values of L62 and LS59-1 brasses are due to an intensive process of phase transition $\alpha \rightarrow \beta$ taking its course at temperatures > 700°C, since the maximum δ value corresponds to the temperatures of the most intensive process of the α-phase decomposition. The connection between the α-phase decomposition and the anomalous ductility effect is confirmed by the change of δ with the change of exposure time of the samples at the testing temperature.

1/B

Card 1/2

S/137/62/000/004/094/201
A052/A101

On the anomalous decrease ...

The magnitude of the anomalous increase of δ is approximately proportional to the amount of the undecomposed surplus α-phase; in connection with this a decrease of the rate of heating leads to an increase of δ owing to the formation of alloys in a higher state of equilibrium. There are 10 references.

M. Matveyeva

[Abstracter's note: Complete translation]

Card 2/2

S/137/62/000/003/115/191
A060/A101

18.1200

AUTHORS: Starikova, G. V., Presnyakov, A. A.

TITLE: Investigation of ductility of β-brass

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1962, 19, abstract 3I119 ("Tr. In-ta yadern. fiz. An KazSSR", 1961, 4, 39-41)

TEXT: An investigation was carried out on the effect of phase transition on ductility of 2-phase brasses. The investigation was carried out upon specimens of brass Л-52 (L-52) in the cast state with a cross-section of 5 x 20 mm of the working part. Under static tension at temperatures of 300 - 600°C * one observes a sharp rise in ductility, and a drop in the resistance to deformation, which may be explained by a transition to an unordered state. In the region 570 - 600°C one observes a ductility rise connected, apparently, with diffusion processes occurring in the β-phase at these temperatures. There are 5 references.

M. Matveyeva

[Abstracter's note: Complete translation]
[* Editor's note: In the Russian original somethin seems to be missing at this spot.]

Card 1/1

S/126/61/012/006/011/023
E193/E383

AUTHORS: Presnyakov, A.A. and Starikova, G.V.

TITLE: On the nature of anomalous plasticity of two-phase brasses

PERIODICAL: Fizika metallov i metallovedeniye, v.12, no. 6, 1961, 873 - 878

TEXT: In continuation of their earlier work (Ref. 3: Izv. AN SSSR, OTN, Metallurgiya i toplivo, no. 1, 1960) the present authors studied the relationship between plasticity of brasses Л56 (L56) (α+β-brass), L52 and L51.5 (β-brass) and 150 (β+γ-brass), on the one hand, and phase transformations taking place in these alloys, on the other. To this end the elongation of tensile specimens tested at various temperatures and at a strain rate of 10 mm/min was measured, and the temperature-dependence of the electrical resistance of L52 and L50 and lattice parameter of L52 was determined. The results are reproduced graphically. In Fig. 1, elongation (δ, %) of alloys indicated by each curve is plotted against the test temperature (°C).

Card 1/

On the nature of ....

In Fig. 3b, the electrical resistivity ($\rho \times 10^6$ ohm cm) of L52 (lefthand scale) and L50 (righthand scale) is plotted against the temperature (^{o}C). Finally, in Fig. 4, the lattice parameter (kX) of the β-phase containing 52% Cu is plotted against temperature (^{o}C). Analysis of the experimental results correlated with the constitution diagram of the Cu-Zn system led the present authors to the conclusion that the anomalous increase in plasticity of brasses on heating is associated with the increasing proportion of the β-phase, which is very plastic at elevated temperatures. The existence of an intermediate β_H-phase was postulated and it was suggested that the transformation of the β'-phase, stable below 460 ^{o}C, took place according to:

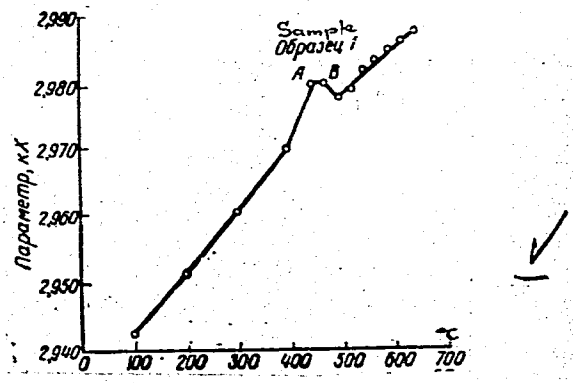
$$\beta' \rightarrow \beta_H \rightarrow (\alpha + \beta) \rightarrow \beta .$$

Card 2/3

There are 4 figures and 18 references: 9 Soviet-bloc and 9 non-Soviet-bloc. The two English-language references quoted are: Ref. 15: C.H. Carpenter, Journ. Inst. of Metals, 1912, 8, 51; Ref. 17: C.H. Carpenter, Journ. Inst. of Metals, 1912, 8, 59.

SUBMITTED: August 15, 1960 (initially)
May 5, 1961 (after revision)

Fig. 4:



Card 3/3

S/817/62/005/000/011/012
A006/A101

AUTHORS: Starikova, G. V., Presnyakov, A. A.

TITLE: Investigating electric resistivity of the Al-Zn eutectoid

SOURCE: Akademiya nauk Kazakhskoy SSR. Institut metallurgii i obogashcheniya. Trudy. v. 5, 1962, Tsvetnaya metallurgiya, 175 - 178

TEXT: Anomalously high ductility (δ = 1,000%) is observed in Al-Zn eutectoid after quenching from a temperature exceeding that of eutectoid transformation. This is explained by the course of a diffusion process of stabilization during deformation. The authors attempted to establish also an anomaly in the variation of electric resistivity of the Al-Zn eutectoid. Al-Zn alloy specimens (79% Zn) were annealed and quenched at 320°C. Electric resistivity was measured after different time of holding at room temperature. The electric resistivity of quenched specimens decreased abruptly during the first 8 - 10 minutes after quenching. After measuring electric resistivity at room temperature, the specimens were heated within 5 minutes to 250°C. The electric resistivity of the quenched and annealed specimens was then equal, and no anomalous effect was ob-

Card 1/2

S/817/62/005/000/012/012
A006/A101

AUTHORS: Presnyakov, A. A., Starikova, G. V.

TITLE: Experimental investigation of kinetic correspondence in the development of super-ductility in metastable eutectics

SOURCE: Akademiya nauk Kazakhskoy SSR. Institut metallurgii i obogashcheniya. Trudy. v. 5, 1962, Tsvetnaya metallurgiya, 184 - 185

TEXT: The investigation was made with metastable specimens of lead-tin eutectics on a special machine designed by V. Ya. Shtraus operating with tension velocities as high as 1.25; 4; 20; 78; 504; and 960 mm/min. The tests were carried out at 20, 40, 65, 90, 115, 140, 155, 165 and 180°C. Maximum indices of super-ductility attaining 425%, are obtained at 4 mm/min tension velocity. Elongation approaching this value takes place at 20 mm/min. At all the other, higher or lower, velocities, ductility indices do not exceed 250%. At 960 mm/min tension velocity, maximum elongation is not over 85%. The ductility maximum varies with temperature. At 1.25 mm/min tension velocity, it is located at about 175°C. At a higher deformation speed (up to 4 mm/min) the

Card 1/2

S/817/62/005/000/012/012
A006/A101

Experimental investigation of...

ductility maximum is attained at 155°C. The results obtained show that in the tension of metastable cast eutectics, highest indices of super-ductility are revealed at a particularly favorable kinetic correspondence of deformation and stabilization processes; they decrease when this correspondence is eliminated. There is 1 figure.

Card 2/2

S/126/62/013/005/021/031
E202/E492

AUTHORS: Starikova, G.V., Presnyakov, A.A.

TITLE: Evaluation of metastable casting eutectics in connection with the phenomenon of "superplasticity"

PERIODICAL: Fizika metallov i metallovedeniye, v.13, no.5, 1962, 769-771

TEXT: Superplasticity was observed earlier in casting eutectics of the Pb-Sn and Mg-Cu system (Izv. AN SSSR, OTN, no.1, 1961) and it was attributed chiefly to the concentration of nonequilibrium in the eutectic alloy obtained during quick cooling. The authors studied the degree of nonequilibrium in terms of the minimum relative amount of atoms, the transfer of which may revert the alloy to the state of full stability. Making a number of assumptions concerning the statistical distribution of components and dividing the alloy into two zones viz. first type in which the decomposition of the alloy leads to the formation of α-phase grains and the second type which produces grains of β-phase, the authors arrive at an expression for the total relative number of atoms diffusing through the boundaries of the above zones.

The latter expression shows that the highest degree of nonequilibrium ($\eta = 0.5$) occurs when the content of the second component in the eutectic is 50% and the solubility in the α- and β-phases with respect to both components is very small. The increase in η does not always correspond to the actually attained nonequilibrium there being also other factors causing the superplasticity which are not fully discussed. Altogether 22 systems are listed in the order of the ascending η. These eutectics are divided further into three groups: 1st - with $\eta < 0.11$ in which there is no superplasticity; 2nd - with $\eta = 0.11$ to 0.24 which shows increased plasticity and sporadic superplasticity and 3rd group with $\eta > 0.24$, which is considerably different structurally and cannot be satisfactorily explained in terms of η alone. There is 1 table.

ASSOCIATION: Institut metallurgii i obogashcheniya AN Kaz.SSR
(Institute of Metallurgy and Ore Enrichment AS Kaz.SSR)

SUBMITTED: April 3, 1961 (initially)
November 27, 1961 (after revision)

PRESNYAKOV, A.A. (Alma-Ata); STARIKOVA, G.V. (Alma-Ata)

Kinetic correspondence between transformations and deformations in the formation of superplasticity. Izv. AN SSSR. Otd. tekh. nauk. Met. i gor. delo no.4:127-129 Jl-Ag '63. (MIRA 16:10)

PRESNYAKOV, A.A.; STARIKOVA, G.V.

Experimental study of the kinetic congruence between transformation and deformation during the emergence of superplasticity. Trudy Inst. met. i obog. AN Kazakh. SSR 7:56-60 '63.

Experimental proof of the "recrystallization by deformation" phenomenon. Ibid.:61-69 (MIRA 17:6)

STARIKOVA, G.V.; PRESNYAKOV, A.A.

Effect of the speed of tension on the plasticity of LS59-1 brass in the $\alpha \rightarrow \beta$ phase transition region. Trudy Inst. met. i obog. AN Kazakh. SSR 10:16-18 '64. (MIRA 18:7)

USSR/Microbiology. Microbes Pathogenic for Man and Animals F

Abs Jour : Ref Zhur-Biol., No 13, 1958, 57652

Author : Starikova K. A.
Inst : Not given
Title : On the Method of Isolation of Strains of Coli

Orig Pub : Sb. otd. nauchn. eva, mikrobiol., epidemiol. i infektsionistov, 1957, vyp. 2, 101-102

Abstract : In order to simplify the method of isolation of hemolytic strains of the coli bacillus the author proposes the use of the modified Endo medium which permits to expose simultaneously hemolytic activity and the ability to ferment lactose. The medium is prepared on dry Endo agar. Before the medium cooled to 45° is poured into a dish, defibrinated sheep's or donor's blood

Card 1/2

STARIKOVA, K. I.

Country : USSR F
Category : Microbiology. Bacteria Pathogenic for Man and Animal

Abs. Jour : Ref Zhur - Biol., No.19, 1956, 86137

Author : Starikova, K.I.
Institut. : Moldavian Scientific Research Institute of Epi-*
Title : Changes in Sensitivity to Sulfonamides and to Synthomycin of Dysentery Bacilli Isolated in the Moldavian SSR in 1954-1955
Orig Pub. : Avtoref. Diss. Kand. Med. N., In-t Epidemiol. i **

Abstract : no abstract

*demiology, Microbiology, and Hygiene

**Mikrobiol. Akad. Med. Nauk SSSR, Mold. N.-I. In-t Epidemiol., Mikrobiol. i Gigiyeny, Kishinev, 1956

Card: 1/1

Starikova, K.I.

USSR / Microbiology - Microbes Pathogenic to Humans and Animals F-4

Abs Jour: Referat. Zh. Biol., No. 1, 1958, 737

Author : Starikova, K.I.

Title : Sulfamide- and Syntomycin Sensitivity of Local Dysentery Strains. Communication 2. The Study of Dysentery Bacteria Resistant to Syntomycin in Tests

Orig Pub: Sb. tr. Mold. n.-i. in-t epidemiol., mikrobiol. i gigiery, 1956, No. 2, 37-51

Abstract: No abstract.

Card 1/1

STARIKOVA, K. I., Cand Med Sci -- (diss) "Changes in sensitivity to sulfanilamides and synthomycin of dysenteric bacteria isolated in the Moldavian SSR in 1954-1955." Kishinev, 1958. 14 pp (Inst of Epidemiology and Microbiology im. N. F. Gamaleya, Acad Med Sci USSR, Moldavian Sci Res Inst of Epidemiology, Microbiology and Hygiene), 250 copies (KL, 18-58, 104)

LYAKHOVICH, K.G.; SOBOLEVA, K.P.; STARIKOVA, K.S.; TARKOV, M.I.; CHERNYAVSKAYA, R.M.; SHOR, R.S.

Causes of the low survival rate of diphtheria bacteria. Zdravookhranenie 3 no.2:29-33 Mr-Ap '60. (MIRA 13:7)

1. Iz Moldavskogo instituta epidemiologii, mikrobiologii i gigiyeny (direktor N.N. Yezhov) i infektsionnoy bol'nitsy g. Kishineva (glavnyy vrach Z.P. Kiseleva).
(DIPHTHERIA--BACTERIOLOGY)

STARIKOVA, L., inzh.

These are our improvement potentialities. Mest.prom.i khud.promys. 2 no.7:30-31 Jl '61. (MIRA 15:1)

1. Gosmestproma RSFSR.

(Shoe industry)

PIRONKOV, St., inzh.; STARIKOVA, L., inzh.

Preparation of high-quality fluorite concentrate from the deposit of Mikhalkovo, Smolyan region. Min delo 18 no.5: 16-18 My '63.

1. "Niproruda".

DUBOVIK, V.N., st. prepodav.; MAMIN, A.U., kand. geol.-miner. nauk, dots.; OTTO, P.I.; RUMYANTSEVA, A.Ya., kand. geogr. nauk, ispolnyayushchiy obyazannosti dots.; SEREGIN, I.A., st. inzh.; MOSKALEV, A.F.; KOLESNIKOV, B.P., prof., doktor biol. nauk, rektor; OKOROKOV, V.I., kand. biol. nauk, dots.; KLIMENKO, R.A.; STARIKOVA, L.A., assistent; SHUMILOVA, V.Ya., assistent; MAKSIMOVA, Ye.A., dots.; KIRIN, F.Ya., kand. geogr. nauk, dots.; KUZNETSOVA, A.V., red.; MATVEYEV, S.M., red.; MOROZOV, V.K., red.; RUTKOVSKIY, I.M., red.; TYAZHEL'NIKOV, Ye.M., red.

[Nature of Chelyabinsk Province] Priroda Cheliabinskoi oblasti. Cheliabinsk, IUzhno-Ural'skoe knizhnoe izd-vo, 1964. 241 p. (MIRA 18:7)

1. Kafedra geografii Chelyabinskogo pedagogicheskogo instituta (for Dubovik, Mamin, Rumyantseva, Kirin). 2. Nachal'nik geologicheskogo otdela Chelyabinskogo geologorazvedochnogo tresta (for Otto). 3. Chelyabinskaya gidrologicheskaya stantsiya (for Seregin). 4. Nachal'nik pochvennoy partii Chelyabinskoy zemleustroitel'noy ekspeditsii (for Moskalev). 5. Institut biologii Ural'skogo filiala AN SSSR (for Kolesnikov). 6. Kafedra zoologii Chelyabinskogo pedagogicheskogo instituta (for Okorokov, Starikova, Shumilova). 7. Chelyabinskiy rybnyy trest (for Klimenko).

15-57-1-935

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 1, p 148 (USSR)

AUTHORS: Shvyryayeva, A. M., Starikova, L. M.

TITLE: The Prospects of Using Geobotanical Indicators for Detecting Salt-Dome Structures (Perspektivy ispol'zovaniya geobotanicheskikh priznakov dlya obnaruzheniya solyanokupol'nykh struktur)

PERIODICAL: Tr. Vses. aerogeol. tresta, 1955, Nr 1, pp 82-88.

ABSTRACT: A comparison of a structural map from one of the Caspian districts, with a map of saline soils, constructed from geobotanical data, shows a coincidence of areas of salt-dome structures with districts of maximum salinity of soil and of development of hypertrophied plant forms, in association with increased bitumen content of the soil. Because of their simiplicity and economy, geobotanical investigations deserve attention and are recommended for reconnaissance work. Yu. Ye. B.

Card 1/1

STARIKOVA, L. P.

"Iodometric Determination of Peroxides, Formed During the Oxidizing Spoilage of Edible Fats." Sub 22 Mar 51, Moscow Chemicotechnological Inst of the Meat Industry.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

CA
1951

Fats, Waxes, and Detergents

Determination of peroxides in fat. N. Drozdov and L. Starikova. *Uyesnaya Ind. S.S.S.R.* 22, No. 3, 52-4 (1951).—Various common methods of detg. the peroxide value of fats gave different results on the same sample. Use of different mineral acids, different concns. of an acid, and different reaction times also affected the results. A new method was developed which gave sharp consistent results. In a 150-200-ml. flask add 2 ml. 60% H_2SO_4 or .5 ml. HCl and 1 ml. dimethylaniline; mix, cool, and add a soln. of 1 g. test fat in 5 ml. $CHCl_3$ or 5–20 ml. CH_2Cl_2 in CH_2Cl and 1 ml. satd. soln. KI; mix for 1 min., add 50 ml. H_2O and a measured amt. of excess 0.01 *N* soln. of $Na_2S_2O_3$; mix well and titrate excess $Na_2S_2O_3$ with a 0.01 *N* I soln. with starch as the indicator. M. M. Piskur

DROZDOV, N., STARIKOVA, L.

Oils and Fats

Methods of evaluating the quality of edible fats. Mias. ind. SSSR 23 no. 1, 1952.

9. Monthly List of Russian Accessions, Library of Congress, August 1952 Uncl.

STARIKOVA, L.

Modified method for determining peroxides in fat. Myasnaya Ind. S.S.S.R. 24, No.2, 72-3 '53. (MLRA 6:4)
(CA 47 no.15:7794 '53)

PANKOVA, F., kandidat tekhnicheskikh nauk; STARIKOVA, L., kandidat khimicheskikh nauk.

Drying egg products. Mias.ind. SSSR 24 no.6:34-37 '53. (MLRA 6:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut ptitsepererabatyvayushchey promyshlennosti.

(Eggs, Dried)

STARIKOVA, L., kandidat khimicheskikh nauk.

Effect of lecithin in lowering the quality of egg fat. Mias. ind. SSSR no.2:47-49 '57. (MLRA 10:5)
(Eggs) (Lecithin) (Oils and fats)

SOV/137-57-10-18591

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 10, p 17 (USSR)

AUTHORS Lukicheva, T.P., Starikova, L.V.

TITLE Flotation of Lean Polymetallic Ore (Flotatsiya ubogoy polimetallicheskoy rudy)

PERIODICAL Nauchn. raboty stud. Sverdl. gorn. in-t, 1957, Nr 3, pp 85-97

ABSTRACT A description is presented of laboratory experiments in bulk flotation (F) of ore containing sulfides of Pb, Cu, Zn, Mo, and Fe. The total sulfides content is ~ 4%. The following optimum F conditions are established: 20 min grinding time, which signifies reduction of 87% to -200 mesh, pH 7.5-8, and F time 10 min. Analysis of the concentration products shows that the finer sulfide classes go into the 1st concentrate and that as F time increases the size of the sulfide grains undergoing flotation also rises. To eliminate overcomminution of the material it is recommended that the middlings (M) of the first and last middlings cells of the flotation machine be treated separately. The larger M of the last cells should be sent for regrinding and the smaller M of the first cells

Card 1/2

Flotation of Lean Polymetallic Ore

should either go to the head of the F process or to further grinding, this time for a shorter time.

M.L.

Card 2/2

32529

11.9700 also 1583 2209

S/065/61/000/012/002/005
E075/E135

AUTHORS: Rudenko, M.G., Sobolev, Yu.P., Yatsenko, M.S., and Starikova, L.V.

TITLE: Synthesis and properties of esters of arylstearic acids

PERIODICAL: Khimiya i tekhnologiya topliv i masel, no.12, 1961, 7-11

TEXT: Some esters of arylstearic acids were synthesized and their properties investigated for the first time to ascertain the feasibility of their use as synthetic lubricating oils. Phenyl, o-xylyl and p-xylylstearic acids were obtained by condensing commercial oleic acid with the respective hydrocarbons in the presence of $AlCl_3$. The ratio of weights of the hydrocarbons to that of oleic acid was 5:1, $AlCl_3$ and oleic acids were used in equimolar quantities. The reaction was carried out at 80 °C for 5-6 hours. The reactions with naphthalene and diphenyl ether were conducted in solution in trichlorbenzene. The acids were purified by vacuum distillation. The physical constants of

Card 1/3

X

Synthesis and properties of esters...

phenoxyphenylstearic and o-xylylstearic acids were different from those reported in the literature. The acids were esterified with methyl-, benzyl- and 2-ethylbenzyl alcohols. Almost all the esters solidify from -40 to -60 °C. Benzyl esters of naphthyl- and phenoxyphenylstearic acids solidify at -35 °C, whilst their methyl esters solidify at -40 and -50 °C respectively. Methyl ester of phenylstearic acid solidifies at -26 °C and the benzyl ester at -50 °C, although the viscosity of the latter ester is much higher than that of the methyl ester (19.32 and 11.38 cs at 50 °C respectively). The relatively low solidification temperatures of the esters are partly due to the fact that they are mixtures of different isomers. Viscosity of the esters increases with the carbon number of the alcoholic group and the molecular weight of the hydrocarbon substituent, with the exception of the esters of phenoxyphenylstearic acid which have lower viscosities than the naphthylstearic acid esters. The viscosities range from 11.4 to 51.1 cs at 50 °C and 3.7 to 9.9 cs at 100 °C. Thermal stability of the esters was investigated by passing air through the esters heated at 300 °C at the rate of

32529

Synthesis and properties of esters.. S/065/61/000/012/002/005
E075/E135

5 ml/min for 10 hours. Methyl ester of phenoxyphenylstearic acid and benzyl ester of p-xylylstearic acid had the highest oxidation stability; however, the latter showed an excessive corrosivity towards steel. The two esters responded well to additive АзНИИ-10 (AzNII-10), which lowered the evaporation losses and eliminated the corrosive tendendies. It is concluded that these esters could be used as lubricating oils at 300 °C with suitable additives. There are 3 tables and 9 non-Soviet-bloc references. The four most recent English language references read as follows:

Ref.5: R.H. McKee, H.B. Faber, US Pat. 1972568 (1934).
Ref.6: A.J. Stirton, B.F. Peterson. Ind.Eng.Chem., v.31, 856, 1939.
Ref.7: W. Kimura, T. Omura, H. Taniguchi. Ber., v.71, 2686, 1938.
Ref.8: A.J. Stirton, B.B. Schaeffer, A.A. Stavitzke, J.K. Weil, C. Waldo. J.Amer. Oil Chem.Soc., v.25, 365, 1948.

ASSOCIATION: Institut neftekhimicheskogo sinteza AN SSSR
(Institute of Petrochemical Synthesis, AS USSR)

Card 3/3

X

L 02298-67 EWT(m)/T FDN/DJ/GD

ACC NR: AT6015201 (A, N) SOURCE CODE: UR/0000/66/000/000/0099/0103

AUTHOR: Starikova, L. V.; Bleyes, G. S.; Kruglova, Ye. T. 61 B+1

ORG: none

TITLE: Method for evaluating the thermo-oxidative stability of aviation oils at elevated temperatures

SOURCE: Metody otsenki ekspluatatsionnykh svoystv reaktivnykh topliv i smazochnykh materialov (Methods for the performance evaluation of jet propellants and lubricants). Moscow, Izd-vo Mashinostroyeniye, 1966, 99-103

TOPIC TAGS: lubricating oil, lubricant property, lubricant viscosity, heat resistance, vaporization, high temperature oxidation, aircraft lubricant

ABSTRACT: A laboratory method for evaluating the performance properties of petroleum oils at elevated temperatures was developed and examined. The method is an adaptation of VTI GOST 981-55, wherein conditions for oxidizing the oil were changed to make the test applicable to high temperature testing. Oxidations were run in the apparatus shown in Fig. 2 under temperatures controlled by thermostat shown in Fig. 1.

Card 1/4 UDC: 662.753.32:629.13.001.4

02298-67

ACC NR: AT6015201

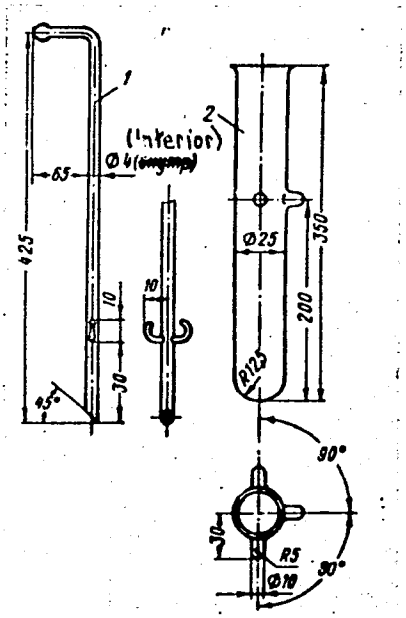


Fig. 1. Diagram of air electric thermostat: 1.--mantle, 2--agitator shaft, 3--cross pieces for mounting 4, 4--rotating cylinder, 5--agitator blades, 6--electric motor, 7--cover, 8--apparatus for oxidations, 9--electric heater, 10--thermocouple, 11--mercury thermometer.

Card 2/4

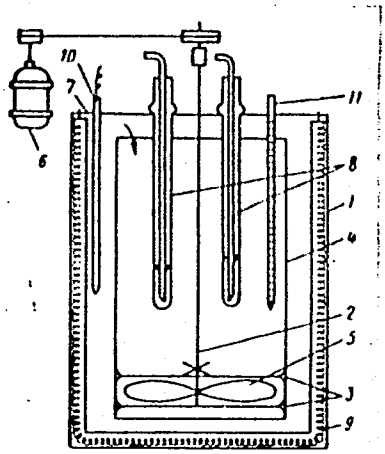


Fig. 2. Apparatus for oxidizing oil:
1--tube for feeding air to oxidize the oil,
2--reaction vessel.

STARIKOVA, M.N.

Use of ultraviolet rays and inductothermy in the compound treatment of fresh fractures of the extremities. Vop.kur., fizioter. i lech. fiz. kul't. 23 no.5:420-424 S-O '58 (MIRA 11:11)

1. Iz khirurgicheskogo otdeleniya (zav. - prof. A.M. Landa) Nauchno-issledovatel'skogo instituta fizioterapii Ministerstva zdravookhraneniya RSFSR (dir. - chlen-korrespondent AMN SSSR prof. A.N. Obrosov).
(ULTRAVIOLET--THERAPEUTIC USE)
(ELECTROTHERAPEUTICS)
(FRACTURES)

STARIKOVA, M. N. Cand Med Sci -- (diss) " Application of ultraviolet rays and inductothermia in combined treatment of patients with fresh fractures of extremity bones." Mos, 1959. 15 pp (Min of Health RSFSR. State Sci Res Inst of Resort Studies and Physiotherapy), 200 copies (KL, 46-59, 140)

LANDA, A.M. [deceased]; STARIKOVA, M.N.

Use of inductothermy, ultraviolet rays, aeroionization and exercise therapy in a compound treatment of thermal burns. Vop. kur., fizioter. i lech. fiz. kult'. 30 no.3:229-232 My-Je '65. (MIRA 18:12)

1. Ortopedo-travmatologicheskaya klinika (zav.- prof. A.M. Landa [deceased]) TSentral'nogo instituta kurortologii i fizioterapii (direktor - dotsent G.N. Pospelova), Moskva.
Submitted November 18, 1964.

STARIKOVA, M. V.

AUTHOR: Starikova, M. V. (Moscow) 24-9-4/33

TITLE: On investigating auto-oscillations and the stability of automatic systems with a non-symmetrical non-linearity in presence of external action. (K issledovaniyu avtokolebaniy i ustoychivosti avtomaticheskikh sistem s nesimmetrichnoy nelineynost'yu pri nalichii vneshnego vozdeystviya).

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1957, No.9, pp. 27-32 (USSR)

ABSTRACT: The author investigates a non-linear automatic control system with block diagrams as shown in Figs. 1 and 2, p.27, by using the delay method proposed by Ye. P. Popov (Refs. 2 and 3) which is based on the harmonic balance principle. The aim of the paper is to determine the influence of the parameters of the system and of slowly changing disturbing effects on the amplitude and frequency of auto-oscillations and the selection of parameters ensuring absence of auto-oscillations and a stable state of equilibrium. The described work was carried out under the guidance of B. N. Petrov. Para.1 deals with the equations of the individual elements and the harmonic linearisation of the non-linearities, whereby the

Card 1/2

SOV/24-58-12-8/27

AUTHOR: Starikova, M.V. (Moscow)

TITLE: The Sliding Mode in a Self-regulating System (Issledovaniye skol'zyashchego rezhima v avtoreguliruyemoy sisteme)

PERIODICAL: Izvestiya Akademii Nauk, Otdeleniye Tekhnicheskikh Nauk, 1958, Nr 12, pp 53-58 (USSR)

ABSTRACT: A non-linear system is considered which is subject to a fixed or slowly and monotonically varying input, or which is recovering from a sudden displacement of the reference point. By "sliding" the author means that the output co-ordinate varies monotonically but with self-oscillation waves superimposed on it. A relay system is considered, using Bogolyubov's harmonic linearization method to give the smoothed characteristics of the relay. The transient response is then derived from the frequency response using the resulting linearized equations. The conditions for "sliding" to exist are Eq. (3.1.1) and (3.1.2). The treatment is

Card 1/2

The Sliding Mode in a Self-Regulating System

largely an exercise in the application of the methods. There are 9 figures and 5 Soviet references.

SUBMITTED: 29th July 1958.

Card 2/2

STARIKOVA, M.V.

Nonsymmetrical self-oscillations in automatic control systems with a gradually varying external action. Avtom. upr. i vych. tekh. no.2:271-295 '59. (MIRA 13:2)

(Automatic control)

23153

S/024/61/000/003/001/012
E140/E463

16.8000 (1031, 1121, 1132)

AUTHORS: Petrov, B.N. and Starikova, M.V. (Moscow)

TITLE: Investigation of self-oscillation in automatic control systems with logical devices

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Energetika i avtomatika, 1961, No.3, pp.3-13

TEXT: The article considers automatic control systems of high order, containing logical devices for processing the signals obtained from the controlled object. It is assumed that the logical device processes two input signals, each taking on three values (+1, 0, -1), and yielding a single discrete output signal for activizing the controller. Such a system is shown in Fig.1, where 1 - the regulator, 2 - the regulated object, 3, 5 - linear amplifiers, 4, 6 - nonlinear devices with characteristics shown at the bottom left and the bottom right parts of the figure, 7 - the logical device, 8 - the servomotor; α is an intermediate point in the object where a lead signal is obtained, β is the point where the error signal is obtained, corresponding to the discrete functions U_x and U_y respectively, and U is the output from the logical device. The main purpose of the

Card 1/4

logical device is to determine whether the lead signal and the error signal have identical or opposite signs and to generate a corresponding signal for the servomotor. For an output signal consisting of five discrete values ($\pm U_1$, $\pm U_2$, 0; $U_1 > U_2$), the functional table is given by Table 1. It is desirable that the phase shift between the x and y signals be in the range $0 < \varphi \leqslant 90°$. An elementary discussion is given on the realization of Table 1 by contact networks, using simple Boolean algebra. Oscillations in the system are examined by the method of harmonic linearization of the nonlinearity (expansion in series and retention of first term). The coefficients of harmonic linearization are functions of the lead angle φ, the parameters of the logical device, the amplitude and frequency of oscillation. The characteristic equation for self-oscillation of such a system will be an equation with constant coefficients. The behaviour of the linearized system at the stability boundary can be found by a method of Ye.P.Popov and I.P.Pal'tov (Ref.2: Approximate methods for the investigation of nonlinear automatic systems. Fizmatgiz, 1960). The method given in the paper can also be used for logical

Investigation of self-oscillation...

devices with inputs obtained from the error and feedback signals, or other such combinations. It can also be extended to systems containing logical devices with three input coordinates and a single output. There are 4 figures, 4 tables and 7 Soviet references.

SUBMITTED: February 25, 1961

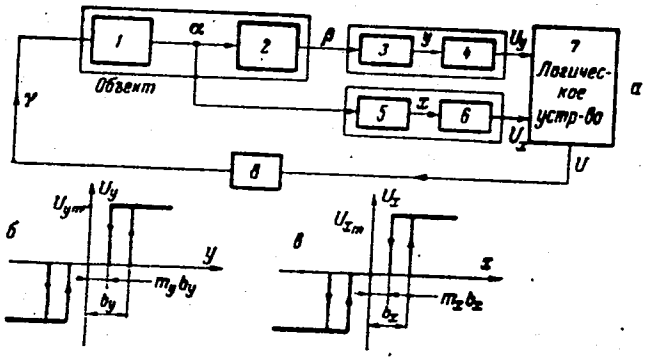
Table 1.

U_x	0	0	0	+1	+1	+1	−1	−1	−1
U_y	0	+1	−1	0	+1	−1	0	+1	−1
U	0	U_1	$-U_1$	U_2	U_1-U_2	$-U_1+U_2$	$-U_2$	U_2-U_1	U_1

Card 3/ 4

23153
S/024/61/000/003/001/012
E140/E463

Investigation of self-oscillation ..



Card 4/4

Fig.1.

PHASE I BOOK EXPLOITATION SOV/6172

Starikova, M. V.

Avtokolebaniya i skol'zyashchiy rezhim v sistemakh avtomaticheskogo reguliro-vaniya i upravleniya (Self-Induced Oscillations and Sliding Modes in Automatic Regulation and Control Systems) Moscow, Mashgiz, 1962. 194 p. Errata slip inserted. 6300 copies printed.

Ed. (Title page): B. N. Petrov, Academician; Ed.: Z. S. Baranova, Engineer; Tech. Ed.: V. D. El'kind; Managing Ed. for Literature on Means of Automation and Instrument Construction: N. V. Pokrovskiy, Engineer.

PURPOSE: This book is intended for a wide audience of engineers engaged in designing new systems of automatic regulation and control. It may also be recommended to aspirants and advanced students at schools of higher technical education specializing in automatic regulation.

Card 1/2

16.6800

S/024/62/000/001/004/013
E140/E435

AUTHOR: Starikova, M.V. (Moscow)

TITLE: Approximate investigation of self-oscillation in nonlinear two-channel automatic control system

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye tekhnicheskikh nauk. Energetika i avtomatika. no.1, 1962, 116-125

TEXT: The author uses the method of harmonic linearization to obtain expressions for periodic solutions in multi-circuit systems containing two nonlinearities in parallel branches. The study concerns systems of arbitrary order in which the number of regulators exceeds the number of regulated quantities. The characteristic equation of the system is obtained in general form and from this the conditions for the periodic solutions. The equations obtained cannot be solved in general form but are suitable for grapho-analytic or computer methods. A procedure is given for an economical grapho-analytic solution giving the boundary of stability in the parameter plane, the amplitudes of self-oscillations, etc. The method is directly valid for

Approximate investigation ...

arbitrary symmetrical nonlinearities. For unsymmetrical nonlinearities, it is necessary to find relations giving the constant components of periodic solutions, in addition to the relations given. The work was done under the direction of B.N.Petrov. There are 2 figures.

SUBMITTED: August 17, 1961

Card 2/2

ACCESSION NR: AP4041966 S/0280/64/000/003/0109/0116

AUTHOR: Petrov, B. N.(Moscow); Starikova, M. V. (Moscow)

TITLE: Determination of oscillatory processes in complex nonlinear systems for various initial deviations

SOURCE: AN SSSR. Izv. Tekhnicheskaya kibernetika, no. 3, 1964, 109-116

TOPIC TAGS: automation, automatic control system, nonlinear control system, control system stability, control system oscillation

ABSTRACT: A method is proposed for determining the presence of periodic solutions in a high order nonlinear automatic control system. The system satisfies filter conditions, i.e., the harmonic balance methods of N. N. Kry*lov and N. M. Bogolyubov are applicable. The method of harmonic linearization allows one to represent all the initial conditions as one amplitude A_o and analysis proceeds in the three-dimensional coordinate system A, X (A,ω) and jY (A,ω) where X and Y are real and imaginary parts of the characteristic equation of the system and A is the amplitude axis. Periodic solutions exist if the characteristic plane F (X, jY, A) = 0 intersects the A-axis and the values of A and ω at this point correspond to this solution. Since the plane F = 0 is generally difficult to find, the method is extended to enable the determination of periodic solutions from the curve Y(A),

Card 1/2

ACCESSION NR: AP4041966

which is determined from the points of intersection of characteristic curves with the plane /X, jY/. If a periodic solution exists, some branches of Y (A) will intersect the A - axis and the values of A at these points are amplitudes of the periodic solutions. The number of intersections is determined from the signs of dY/dA and Y as A is varied. If the branches of Y (A) follow the Mikhaylov criterion, the periodic solution is stable. A bistable solution results whenever Y (A) has an extremum at Y = 0, i.e. Y (A) is tangent to the A - axis. An unstable solution results at the boundary which divides the zones of "attraction" of two stable solutions. An example is given for a system of 3 poles and two-step, odd nonlinearity. Orig. art. has: 19 equations and 7 figures.

ASSOCIATION: none

SUBMITTED: 30Nov62 ENCL: 00 SUB CODE: IE

NO REF SOV: 008 OTHER: 000

Card 2/2

L 04951-67 EWT(d)/EWP(v)/EWT(k)/EWP(h)/EWP(l)

ACC NR: AP6025411 SOURCE CODE: UR/0103/66/000/007/0073/0079

46
B

AUTHOR: Starikova, M. V. (Moscow)

ORG: none

TITLE: The study of an automatic system with a logical unit in the presence of external actions

SOURCE: Avtomatika i telemekhanika, no. 7, 1966, 73-79

TOPIC TAGS: nonlinear automatic control system, perturbation, harmonic linearization, logic element, oscillation

ABSTRACT: In an earlier paper, the author and B. N. Petrov (Izv. AN SSSR, Otd. tekhn. nauk, Energetika i avtomatika, No 3, 1961) investigated free oscillations of a complex nonlinear automatic system with a logical unit. In the present article an approximate method is proposed for the study of an analogous system in the presence of a constant or slowly varying perturbation which simulates the real operating conditions of such a system. The method is based on harmonic linearization; the expressions for the coefficients of such linearization are

Card 1/2 UDC: 62-501.3

L 04951-67

ACC NR: AP6025411

derived for different ranges of outside interference. The new approach allows the determination of the auto-oscillation amplitude and frequency dependence on the external action and yields the stability regions of the system. Orig. art. has: 31 formulas and 5 figures.

SUB CODE: 09/ SUBM DATE: 25Nov65/ ORIG REF: 004

Card 2/2

STANKOVA, M. D.

Dissertation: "Benthic Deposits of Some Reservoirs of the Canal imeni Moscow." Cand Geog Sci, Inst of Oceanology, Acad Sci USSR, 4 Jun 54. Vechernyaya Moskva, Moscow, 25 May 54.

SO: SUM 284, 26 Nov 1954

STARIKOVA, N.D.

Organic substance in the depth of Bering Sea deposits.
Dokl. AN SSSR 106 no.3:519-522 Ja '56. (MLRA 9:6)

1.Institut okeanologii Akademii nauk SSSR. Predstavleno
akademikom N.M.Strakhovym.
(Bering Sea--Sedimentation and deposition)

STARIKOVA, E. D.

Organic matter of the liquid phase of contemporary deposits of the Okhotsk Sea. Dokl. AN SSSR 108 no.5:892-894 Je '56. (MLRA 9:10)

1. Institut okeanologii Akademii nauk SSSR. Predstavleno akademikom S.I. Mironovym.

(Okhots, Sea of--Deep-sea deposits)

STARIKOVA, N.D.

Accumulation and distribution of sediments in certain water reservoirs of the Moscow Canal Dokl. AN SSSR 111 no.6:1326-1329 D '56. (MLRA 10:3)

1. Institut okeanologii Akademii nauk SSSR. Predstavleno akademikom N.M. Strakhovym.
(Moscow Province--Reservoirs)

STARIKOVA, N.D.

Organic matter of bottom deposits from certain reservoirs of the Moscow Canal. Dokl. AN SSSR 112 no.5:934-937 F '57. (MLRA 10:4)

1. Institut okeanologii Akademii nauk SSSR. Predstavleno akademikom N.M. Strakhovym.
(Moscow Canal--Sedimentation and deposition)

STARIKOVA, N.D.

Determining organic carbon in deep-sea solutions of marine deposits by the method of V.G. and V.E. Datsko. Trudy Inst. okean. 26:205-214 '58. (MIRA 11:10)

(Carbon) (Deep-sea deposits)

STARIKOVA, N.D.

Bottom deposits in Ucha, Pyaleve and Yakhroma Reservoirs of the Moscow Canal. Trudy Gidrobiol. ob-va 9:38-52 '59.
(MIRA 12:9)

1. Institut okeanologii AN SSSR.
(Ucha Reservoir--Reservoir sedimentation)
(Pyaleve Reservoir--Reservoir sedimentation)
(Yakhroma Reservoir--Reservoir sedimentation)

STARIKOVA, N.D.

Organic matter in the liquid phase of sediments in the northwestern part of the Pacific Ocean. Trudy Inst.Okean. 33: 165-177 '59. (MIRA 13:4)
(Pacific Ocean--Organic matter)
(Deep-sea deposits)

STARIKOVA, N.D.

Organic matter in bottom deposits of Ucha, Pyalovskoye, and Yakhroma Reservoirs on the Moscow Canal. Trudy Gidrobiol. ob-va 11:370-384 '61. (MIRA 15:1)

1. Institut okeanologii AN SSSR, Moskva.
(Moscow Canal--Sedimentation and deposition) (Organic matter)

STARIKOVA, N.D.

Organic matter in the liquid phase of marine and ocean sediments.
Trudy Inst. okean. 50:130-169 '61. (MIRA 15:1)
(Deep sea deposits)
(Organic matter)

STARIKOVA, N.D.

Organic matter of interstitial solutions and its distribution throughout the sediment stratum in seas and oceans. Dokl. AN SSSR 140 no.6:1423-1426 O '61. (MIRA 14:11)

1. Laboratoriya lesovedeniya AN SSSR. Predstavleno akademikom N.M.Strakhovym.
(Ocean bottom) (Organic matter)

STARIKOVA, N.D.

Study of the qualitative composition of solution organic matter in sea and ocean sediments. Trudy Inst. okean. 54:22-30 '62. (MIRA 16:6)

(Deep-sea deposits) (Organic matter)

STARIKOVA, N.D.; YABLOKOVA, O.G.

Method of determining ammonium nitrogen and organic nitrogen in the solid and liquid phases of marine sediments. Trudy Inst. okean. 67: 157-164 '64. (MIRA 17:12)

STARIKOVA, N.D.; YABLOKOVA, O.G.

Methodology of determining amino acids in seawater. Trudy Inst. okean. 79:14-22 '65. (MIRA 18:8)

KRAKOV, Vladimir Aleksandrovich; STARIKOVA, N.T., red.; BASHMAKOV, G.M., tekhn. red.

[Itsenko-Cushing's syndrome] Sindrom Itsenko-Kushinga. Moskva, Medgiz, 1963. 105 p. (MIRA 17:2)

STARIKOVA, R.P. (L'vov, ul. Mayakovskogo, d.52, kv.1-b)

Case of recovery following surgery for gunshot wound of the left heart ventricle. Nov.khir.arkh. no.6:115 N-D '59. (MIRA 13:4)

1. Kafedra fakul'tetskoy khirurgii (zaveduyushchiy - prof. G.G. Karavanov) lechebnogo fakul'teta L'vovskogo meditsinskogo instituta.
(HEART--WOUNDS AND INJURIES)

STARIKOVA, R.P.

Combination of acute cholecystitis and appendicitis. Khirurgiia (MIRA 13:12)
36 no.2:119-120 F '60.
(GALL BLADDER--DISEASES) (APPENDICITIS)

STARIKOVA, V.B. (Moskva, V-230, Varshavskoye shosse, d.99, korp. 5-G, kv.17)

Effect of 7,12-dimethylbez (α) anthracene on cultures of normal and malignant connective tissues. Vop. onk. 10 no.5:55-60 '64. (MIRA 18:8)

1. Iz laboratorii mekhanizma kantserogeneza (zav. doktor med. nauk Yu.M.Vasil'yev) otdela po izucheniyu kantserogennykh agentov (zav. - deystvitel'nyy chlen AMN SSSR prof. L.M.Shabad) Instituta eksperimental'noy i klinicheskoy onkologii AMN SSSR (dir. - deystvitel'nyy chlen AMN SSSR prof. N.N.Blokhin).

STARIKOVA, V.V.

Methods for studying the seed productivity of plants as examplied by Onobrychis arenaria. Bot. zhur. 48 no.5:696-698 My '63. (MIRA 17:1)

1. Ul'yanovskiy pedagogicheskiy institut.

KOROTKOV, B.A.; STARKEVICH, V.V.

Building water pipelines in the Virgin Territory. Stroi. trub. 9 no.7:3-4 Jl '64. (MIRA 17:11)

1. Trest Benzinoprovodstroy, Chelyabinsk.

PHASE I BOOK EXPLOITATION SOV/3736

Zhalnin, I.Ye., Ye.V. Starikova, P.S. Tindo, V.A. Korobko, and G.N. Ratush, compilers.

Tekhnicheskiye usloviya na nefteprodukty (Standard Specifications for Petroleum Products) Moscow, Gostoptekhizdat, 1960. 462 p. 7,500 copies printed.

Sponsoring Agency: RSFSR. Gosudarstvennaya planovaya komissiya

Ed.: G.Ya. Solganik; Tech. Ed.: A.V. Trofimov.

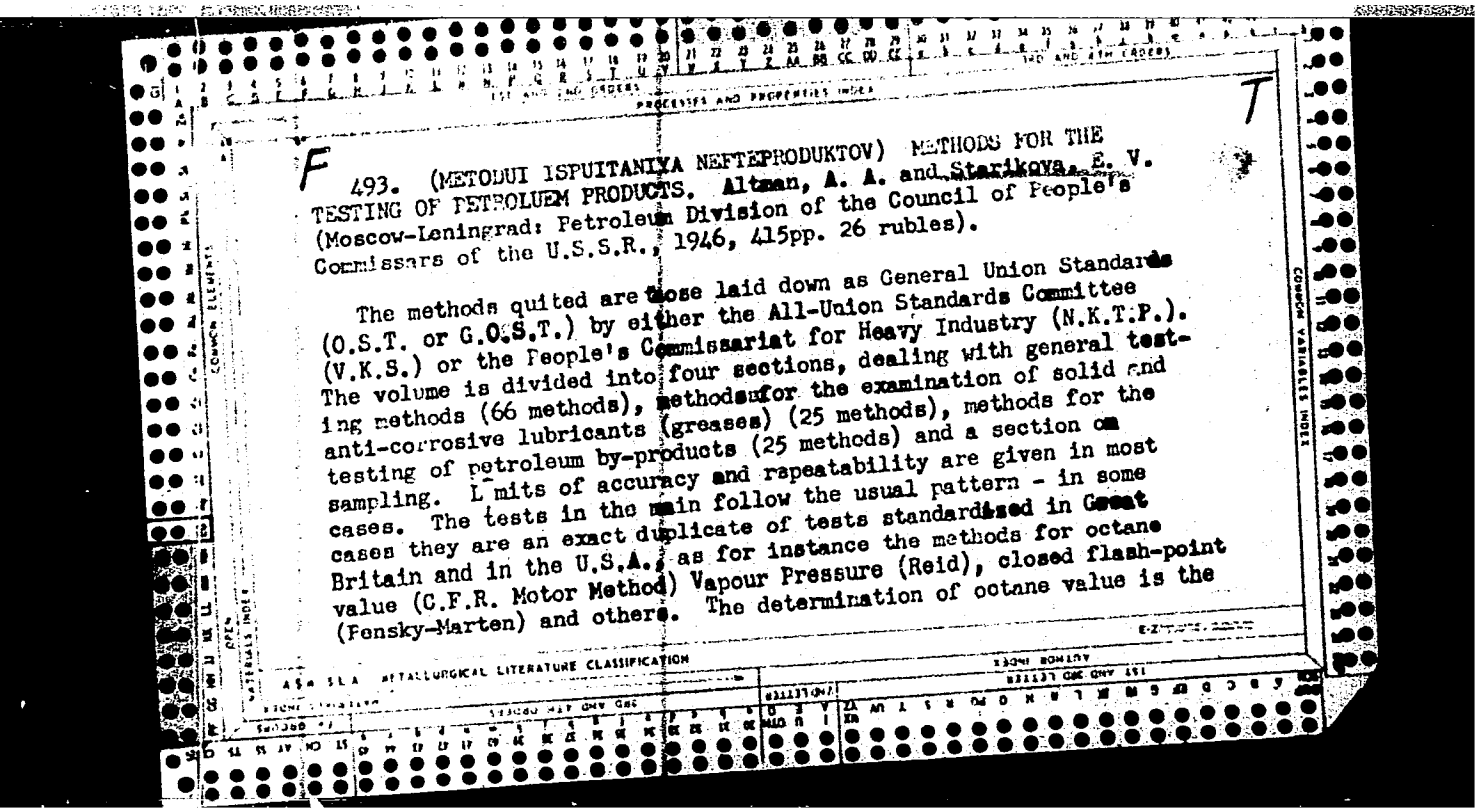
PURPOSE: This book is intended for petroleum refinery personnel and those engaged in purchasing, supply, transportation and other branches of the petroleum industry.

COVERAGE: The book gives specifications for petroleum products including syntnetic hydrocarbons, solvents, illuminating fuel, lubricants, greases, additives, paraffins, ozokerite and ceresine products, petrolatum, asphaltic products, and process materials used

Card 1/21

BURANGULOVA, M.N.; GALIMOV, G.F.; STARIKOVA, Ye.I.

Types of phosphorus in soils of the Sim Agricultural zone of Bashkiria. Mat. po izuch. pochv Bash. ASSR no.1:62-76 '60.
(MIRA 14:3)
(Soils--Phosphorus content)



F

493. (METODUI ISPUITANIYA NEFTEPRODUKTOV) METHODS FOR THE TESTING OF PETROLUEM PRODUCTS. Altman, A. A. and Starikova, E. V. (Moscow-Leningrad: Petroleum Division of the Council of People's Commissars of the U.S.S.R., 1946, 415pp. 26 rubles).

The methods quited are those laid down as General Union Standards (O.S.T. or G.O.S.T.) by either the All-Union Standards Committee (V.K.S.) or the People's Commissariat for Heavy Industry (N.K.T.P.). The volume is divided into four sections, dealing with general testing methods (66 methods), methods for the examination of solid and anti-corrosive lubricants (greases) (25 methods), methods for the testing of petroleum by-products (25 methods) and a section on sampling. Limits of accuracy and repeatability are given in most cases. The tests in the main follow the usual pattern - in some cases they are an exact duplicate of tests standardised in Great Britain and in the U.S.A., as for instance the methods for octane value (C.F.R. Motor Method) Vapour Pressure (Reid), closed flash-point (Pensky-Marten) and others. The determination of octane value is the

T

STARIKOVA, E. V., comp

Russia

1923- U.S.S.R.)
Methods of testing petroleum products; collection of standard methods
Leningrad, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry,
1949. 437 p. (50-26885 rev)

STARIKOVA, E. V., comp

(1923- U.S.S.R.) Vsesoiuzn i komitet standartov. Metody ispytaniia
nefteproduktov...1949. (Card 2, 50-26885 rev)

STARIKOVA, YE. V.

STARIKOVA, Ye.V.; DOBRYAKOVA, N.Ye.; KOROBKO, V.A.; AL'TMAN, A.A.; ROMANOVA, N.V., vedushchiy redaktor; POLOSINA, A.S., tekhnicheskiy redaktor

[Methods of testing petroleum products] Metody ispytaniia nefteproduktov. Moskva, Gos. nauchno-tekhn. izd-vo neftianoi i gornotoplivnoi lit-ry, 1953. 389 p. [Microfilm] (MLRA 7:9)
(Petroleum products--Testing)

ZHALNIN, I.Ye., inzh.; STARIKOVA, Ye.V., inzh.; TINDO, P.S., inzh.; KOROBKO, V.A., inzh.; RATUSH, G.N., inzh.; SOLGANIK, G.Ya., vedushchiy red.; TROFIMOV, A.V., tekhn.red.

[Technical specifications for petroleum products] Tekhnicheskie usloviia na nefteprodukty. Moskva, Gos.nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, 1960. 462 p. (MIRA 13:3)
(Petroleum products) (Petroleum chamicals)

ZHALNIN, I.Ye., inzh.; STARIKOVA, Ye.V., inzh.; TINDO, P.S., inzh.; KOROBKO, V.A., inzh.; RATUSH, G.N., inzh.; SOLGANIK, G.Ya., vedushchiy red.; TROFIMOV, A.V., tekhn.red.

[Technical specifications for petroleum products] Tekhnicheskie usloviia na nefteprodukty. Moskva, Gos.nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, 1960. 482 p.
(MIRA 13:3)

(Petroleum products--Specifications)

STARIKOVA, Ye.V.

Development of standardization in the petroleum industry.
Standartizatsiia 29 no.9:14-15 S '65.
(MIRA 18:12)

MITYAGINA, Z.M.; STARIKOVA, Yu.P.

Preparation of aqueous extracts from the grass, Thermopsis. Trudy Perm. farm. inst. no.1:69-73 '59. (MIRA 15:1)

1. Permskiy farmatsevticheskiy institut, kafedra tekhnologii lekarstv i galenovykh preparatov.
(BUSH PEA) (EXTRACTS)

LEBEDEVA, A.P.; MITYAGINA, Z.M.; STARIKOVA, Yu.P.

Study of the anatomical and morphological structure of the underground system of the meadow geranium and the production of new pharmaceutical preparations from it. Trudy Perm. farm. inst. no.1: 74-80 '59. (MIRA 15:1)

1. Permskiy farmatsevticheskiy institut, kafedra tekhnologii lekarstv i kurs botaniki.
(GERANIUMS)

SOV/69-21-3-2/25

5(4)

AUTHORS: Volarovich, M.P., Gamayunov, N.I., Starikova, Z.A., Churayev, N.V.

TITLE: A Study of the Aquatic Properties and the Structure of Peat With the Aid of Radioactive Isotopes - 2. Changes in the Aquatic and Structural Properties of Peat, when Dispersed or Pressed

PERIODICAL: Kolloidnyy zhurnal, 1959, Vol XXI, Nr 3, pp 257-262 (USSR)

ABSTRACT: The authors describe an experiment carried out with the aid of a radiotracer (Na_2SO_4 with isotope S^{35}) to determine the change in the aquatic properties and the structure of samples of dispersed and compressed peat of different processing stages. The used methods allowed measuring of the total water content of the samples, i.e. the measurings included the water within the cellular cavities of the plant residues, which constitute a considerable part of the peat. It was

Card 1/3

A Study of the Aquatic Properties and the Structure of Peat With the Aid of Radioactive Isotopes - 2. Change in the Aquatic and Structural Properties of Peat, when Dispersed or Pressed

observed that dispersing and compressing of the samples resulted in a diminution of their water content, due to the partial liberation of intracellular water and its passing into the free liquid. This was accompanied by destruction and deformation of the plant residues, which in its turn caused an increase in the active porosity of the peat, particularly in its disperse phase. It was further observed, that during dispersion and compression the kinetic specific surface of the peat considerably increases, whereas the diameter of the pores which determine the internal water transport, is reduced. The pressure needed to make a great part of intercellular liquid pass into free water does not exceed 1 kg/cm^2. It results therefrom, that this kind of water linkage in peat is energetically very weak. The methods developed by the authors permit their being used also for technological processes, which are con-

A Study of the Aquatic Properties and the Structure of Peat With the Aid of Radioactive Isotopes-2. Change in the Aquatic and Structural Properties of Peat, when Dispersed or Pressed

nected with the change in aquatic properties and the structure of peat. The following Soviet scientists (all covered by references) are mentioned in the article: A.A. Berezin, I.D. Belovidov, I.M. Litvinov and M.G. Bulynko. There are 3 graphs, 2 tables and 17 Soviet references.

ASSOCIATION: Moskovskiy torfyanoy institut, Kafedra fiziki (Moscow Peat Institute, Chair of Physics)

SUBMITTED: 19 June 1958

STARIKOVA, Z.A.; PORAY-KOSHITS, M.A.; ZORKIY, P.M.; KHODASHOVA, T.S.

X-ray structural analysis of copper and nickel salicylal-α-phenylethyl iminates. Zhur. strukt. khim. 6 no.2:315-316 Mr-Ap '65. (MIRA 18:7)

1. Institut obshchey i neorganicheskoy khimii imeni Kurnakova AN SSSR.

KOZORIZ, Georgiy Filippovich; STARIKOVICH, A.K., red.

[Efficient designs of cyclones for the woodworking industry] Ratsional'nye konstruktsii tsiklonov v derevoobrabatyvaiushchei promyshlennosti. Moskva, Lesnaia promyshlennost', 1964. 68 p. (MIRA 17:9)

STARIKOVICH, M. A.

UNESCO The Conference Concerning the Utilization of Radioactive Isotopes in Scientific Research, Paris, 9-20 Sept 1957. 30-1-12/39
Vestnik AN SSSR, V. 28, No. 1, pp. 71-78, (Author Vinogradov, A. P.)

of applying marked atoms in the field of physical and chemical processes. M. A. **Starikovich** spoke about the results obtained by investigations with marked atoms as regards the distribution of many salts between water and steam. In reports delivered by E. Ye. Vaynshteyn, L. Yo. Pavlenko and Yu I. Belyayev the application of radioactive isotopes in spectral analysis was dealt with. S. S. Medvedev spoke about problems of the polymerization of ethylene in its gaseous and liquid phase. E. K. Gerling's report on the migration of isomerism K^{38} in nature was read out. V. I. Baranov and L. A. Kuz'min submitted material on the determination of the velocity of the formation of salt on the bottom of the ocean. The author reported on the isotope composition of the milieu of meteorites, rocks, sulphides, etc. On the strength of these data he expressed the idea concerning the difference in processes of creation of various classes of meteorites and various types of the crust of the earth

AVAILABLE: Library of Congress
Card ~~3/3~~ 1. Isotopes (Radioactive)-Applications

BRISKMAN, I.F., inzh.,red.; VYDRA, A.Ya., inzh.,red.; VYSOTSKAYA, M.P., inzh., red.; GORDIYENKO, M.G., inzh.,red.; ZORUK, V.L., inzh.,red.; STARIKOVICH, F.K., inzh., red.; OVSYANNIKOV, Ya.S., red.

[Use of fast dyes and special types of finishes in the textile and knit goods industry; from the materials of the Republic Seminar] Primenenie stoikikh krasitelei i spetsial'nykh vidov otdelok v tekstil'no-trikotazhnoi promyshlennosti; po materialam respublikanskogo seminara. Kiev, In-t tekhn. informatsii, 1962. 181 p. (MIRA 17:11)

1. Respublikanskiy seminar po primeneniyu sintetich kikh krasiteley i spetsial'nykh vidov otdelok v tektsil'no-trikotazhnoy promyshlennosti, Kiev, 1961. 2. Ukrainskiy nauchno-issledovatel'skiy institut po pererabotke iskusstvennykh i sinteticheskikh volokon (for Gordiyenko).

SEMEKHIN, Yu.V.; STARIKOVICH, S.F.

Process of filling crevasses with the ice flow. Inform.sbor.o rab.Geog. fak.Mosk.gos.un. po Mezhdunar.geofiz.godu no.5:87-98 '60. (MIRA 16:3)
(Elbrus, Mount—Glaciers)

STARIKOVICH, S.K.; POLYAKOV, Ye.S., spetsred.; MURASHEVA, O.I., red.; KISINA, Ye.I., tekhn.red.

[Continuous production-line methods in manufacturing short macaroni products] Potochnye linii proizvodstva korotkorezanykh makaronnykh izdelii. Moskva, Pishchepromizdat, 1957. (MIRA 12:11)

(Macaroni)

STARIKOVICH, S.K.

Mechanical forming, cutting and packaging of compressed baker's yeast. Khleb. i kond. prom. 1 no.4:24-25 Ap '57. (MLRA 10:5)

1. Ministerstvo promyshlennosti prodovol'stvennykh tovarov SSSR.
(Yeast)

STARIKOVICH, S. K., KNIZHNIK, Z. B.

Gages

Colored-light and sound signals for indicating the water level in steam boilers. Prom. energ., 9, No. 4, 1952.

Monthly List of Russian Accessions, Library of Congress, June 1952. UNCLASSIFIED.

1. STARIKOVICH, B. K. Eng., : KNIZHNIK, Z. B., ENG.

2. USSR (600)

4. Boilers

7. Facilitating the assembly of the shell in building cylindrical vessels. Prom. energ. 9 no. 10, 1952

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

1. STARIKOVICH, S. K. and KNIZHNIK, Z. B.

2. USSR (600)

4. Pipe

7. Electromechanical rolling of pipes. Prom. energ. 9 No. 11, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

STARIKOVICH, S. K.

STARIKOVICH, S. K. and KNIZHNIK, Z. B. Facilitating Welding of Shells of Cylindrical Containers (Oblegcheniye Sborki Obechayek pri Izgotovlenii Tsilindricheskikh Sosudov), pp. 17-19

A screw-clamp invented by V. F. Kalganov which allows a simultaneous setting of the necessary clearance and equal spacing between welded rims is described. (Drawings).

SO: PROMYSHLENNAYA ENERGETIKA, No. 10, Oct. 1952, Moscow (1502270)

STARIKOVICH, S.K., inzhener; KNIZHNIK, Z.V., inzhener.

Device for stopping idling electric motors connected to machines by friction couplings. Energetik 1 no.2:22 Jl '53. (MLRA 6:8)
(Electric driving)